

inhibiting introduction of oxygen or air into the part when temperature in the part is in a  
pyrolysis temperature range; and

controlling the heat to yield at least about 15 % by weight of a total organic carbon  
content of the part of the formation into condensable hydrocarbons.

5172. (amended) The method of claim 5160, further comprising providing hydrogen ( $H_2$ ) to the  
part to hydrogenate hydrocarbons within the part.